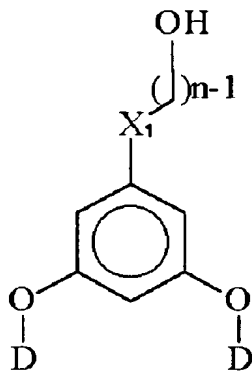


### Abstract of the Disclosure

Organic dye molecular materials prepared by coupling existing organic chromophore molecules to benzene or carbazole derivatives and nonlinear optical polymeric compounds having polyimide repeating units coupled with the organic dye molecular material are provided. The organic dye molecular material coupled to a polymer main chain in the preparation of the nonlinear optical polymeric compound has the following formula:



where  $X_1$  is carbon, oxygen, sulfur, nitrogen, ester ( $\text{CO}_2$ ), or amide ( $\text{CONR}_1$ ), where  $R_1$  is an alkyl or phenyl group having 1 to 6 carbon atoms, D is an organic chromophore molecule, and  $n$  is an integer from 1 to 10.